

## Combustion Appliance Zone Pressure Test - Air Handler Effect

Equipment: Manometer or magnahelic gauge (1 Pascal resolution)

### 1. Definitions

**CAZ** - Combustion Appliance Zone. A zone in the house that contains a combustion appliance. CAZs need not be heated. For example, a garage with a combustion-fired furnace or water heater is a CAZ. Exception: A zone with an appliance that has an isolated combustion path preventing mixing of room air and combustion air is not considered a CAZ.

**Pa** - Pascals. Standard unit of air pressure measurement. Approximately 1/250-inch water gauge.

**WRT** - With reference to. When measuring pressure differences, one zone is the reference zone. Pressure measured in the other zone is WRT the reference zone.

### 2. Baseline Pressure or Zero Gauge

- A. Close all exterior doors and windows.
- B. Open all interior doors except the garage or unheated basement.
- C. Turn off all exhaust equipment and air handlers.
- D. If using a digital manometer, measure baseline pressure.  
If using a magnahelic gauge, set gauge to 0 Pa.  
Record pressure of House WRT Outside: \_\_\_\_\_ Pa
- E. Proceed to "House preparation," below.

### 3. House preparation

- A. Close all interior doors except for doors next to the CAZ that have negative pressure WRT CAZ.
- B. Turn off all exhaust devices, including clothes dryer, bathroom fans, kitchen fans and central vacuum cleaner.
- C. Open all return and supply registers.
- D. Remove furnace air filter and any pre-filters.
- E. Close off any outside air to duct system, if possible.
- F. Close exterior doors and windows.
- G. Turn off combustion devices so that they will not operate during test (except furnace if air handler will not operate at high speed without firing).
- H. Close manual flue dampers. Remember to return dampers to as-found positions after completing test.

### 4. Test procedure

- A. Turn on air handler to highest speed.
- B. Open door(s) between CAZ and neighboring room(s) if pressure of the room is negative WRT CAZ.
- C. Record pressure of CAZ WRT Outside: \_\_\_\_\_ Pa  
Note: If using a digital manometer, adjust for baseline pressure (subtract baseline pressure from reading). If using a magnahelic gauge, no adjustment is necessary.